Treasury Presentation to TBAC

Office of Debt Management



Fiscal Year 2020 Q4 Report

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Section I: Executive Summary

Highlights of Treasury's November 2020 Quarterly Refunding Presentation to the Treasury Borrowing Advisory Committee (TBAC)

Receipts and Outlays through Q4 FY2020

- Through Q4 FY2020, overall receipts totaled \$3,420 billion, reflecting a decrease of \$42 billion (-1%) compared to the same period last year. Non-withheld and SECA taxes declined \$29 billion (-4%), gross corporate taxes declined \$14 billion (-5%), withheld and FICA taxes declined \$25 billion (-1%), and gross excise taxes declined \$8 billion (-8%) primarily due to the economic impact of the COVID-19 outbreak as well as tax law change. Partially offsetting the overall dollar decrease, individual refunds were \$6 billion (-3%) lower and Federal Reserve Earnings were \$29 billion (55%) higher reflecting greater holdings and lower interest rates paid on reserves. FY2020 receipts were 16.3% of GDP, compared to 16.3% of GDP for FY2019.
- Through Q4 FY2020, overall outlays were \$6,552 billion, reflecting an increase of \$2,105 billion (47%) over the comparable period last year. Small Business Administration outlays are \$577 billion higher due to subsidy estimates for the Paycheck Protection Program (PPP) and spending for the Economic Injury Disaster Loan (EIDL) program. Treasury outlays were \$462 billion (67%) higher mainly due to Economic Impact Payments and payments to the Coronavirus Relief Fund & Air Carrier Workers Support Fund stemming from the COVID-19 outbreak. Department of Labor outlays were \$442 billion higher due to increased unemployment costs attributable to the COVID-19 outbreak. Health and Human Services spending was \$290 billion (24%) higher mainly due to relief payments for hospitals as well as advance payments to fee for service Medicare providers, due to the COVID-19 outbreak as well as overall increases to Medicare and Medicaid. Overall outlays FYTD through March, prior to the impact of the COVID-19 outbreak, were up 7%. From April through September however, total outlays rose 87% compared to the same period last year. FY2020 outlays were 31.2% of GDP, compared to 21.0% of GDP for FY2019.

Projected Net Marketable Borrowing (FY2021)

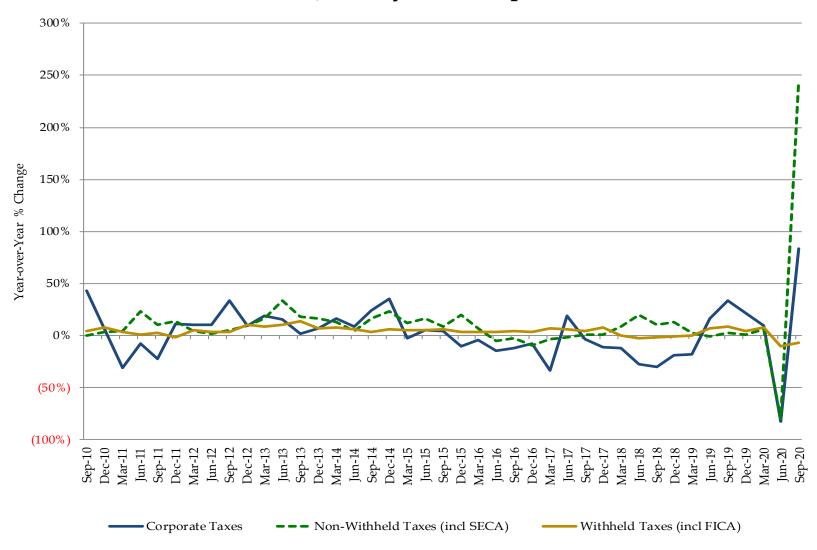
• Treasury's Office of Fiscal Projections (OFP) currently forecasts a net privately-held marketable borrowing need of \$617 billion for Q1 FY2021, with an end-of-December cash balance of \$800 billion. For Q2 FY2021, OFP forecasts a net privately-held marketable borrowing need of \$1,127 billion assuming end-of-March cash balance of \$800 billion. The aforementioned estimates reflect OFP's assumption of \$1 trillion in additional stimulus. Privately-held marketable borrowing excludes rollovers (auction "add-ons") of Treasury securities held in the Federal Reserve's System Open Market Account (SOMA) but includes financing required due to SOMA redemptions. Secondary market purchases of Treasury securities by SOMA do not directly change net privately-held marketable borrowing but, all else equal, when the securities mature and assuming the Fed does not redeem any maturing securities would increase the amount of cash raised for a given privately-held auction size by increasing the SOMA "add-on" amount.

Demand for Treasury Securities

- Bid-to-cover ratios for all securities were within historical ranges over the last quarter.
- · Foreign demand remained stable.

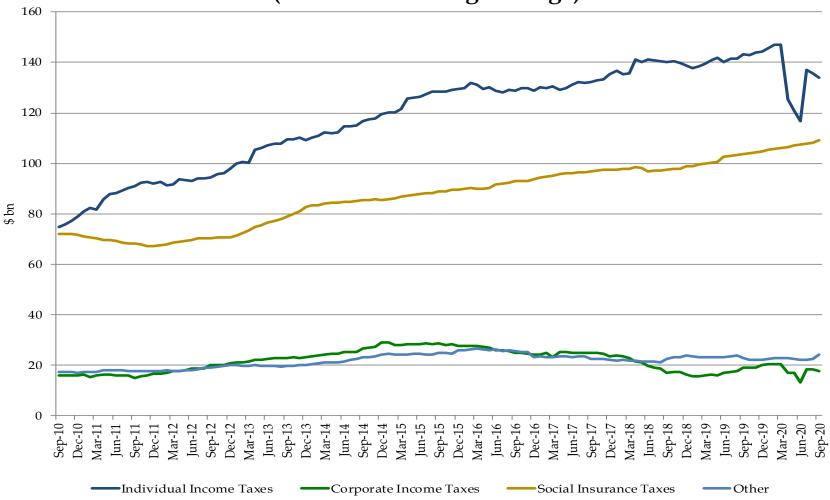
Section II: Fiscal

Quarterly Tax Receipts



Quarterly tax receipts for Q4 FY2020 reflect the adjustment of April and June 2020 tax deadlines to July 15th, 2020. Source: United States Department of the Treasury

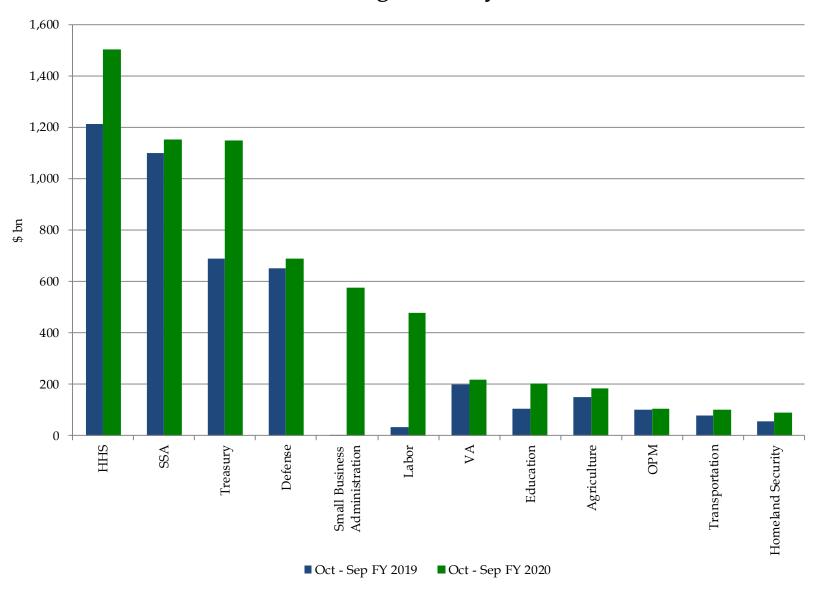
Monthly Receipt Levels (12-Month Moving Average)



Quarterly tax receipts for Q4 FY2020 reflect the adjustment of April and June 2020 tax deadlines to July 15th, 2020. Individual Income Taxes include withheld and non-withheld. Social Insurance Taxes include FICA, SECA, RRTA, UTF deposits, FUTA and RUIA. Other includes excise taxes, estate and gift taxes, customs duties and miscellaneous receipts.

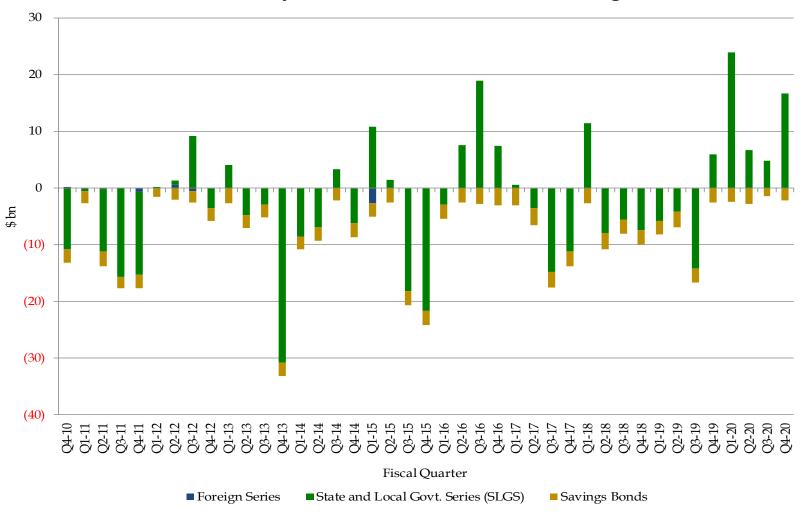
Source: United States Department of the Treasury

Largest Outlays



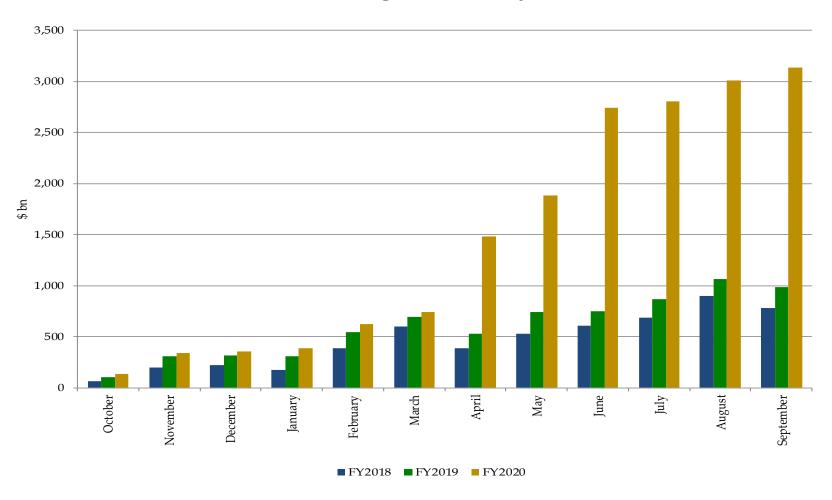
Source: United States Department of the Treasury

Treasury Net Nonmarketable Borrowing



Source: United States Department of the Treasury

Cumulative Budget Deficits by Fiscal Year



Source: United States Department of the Treasury

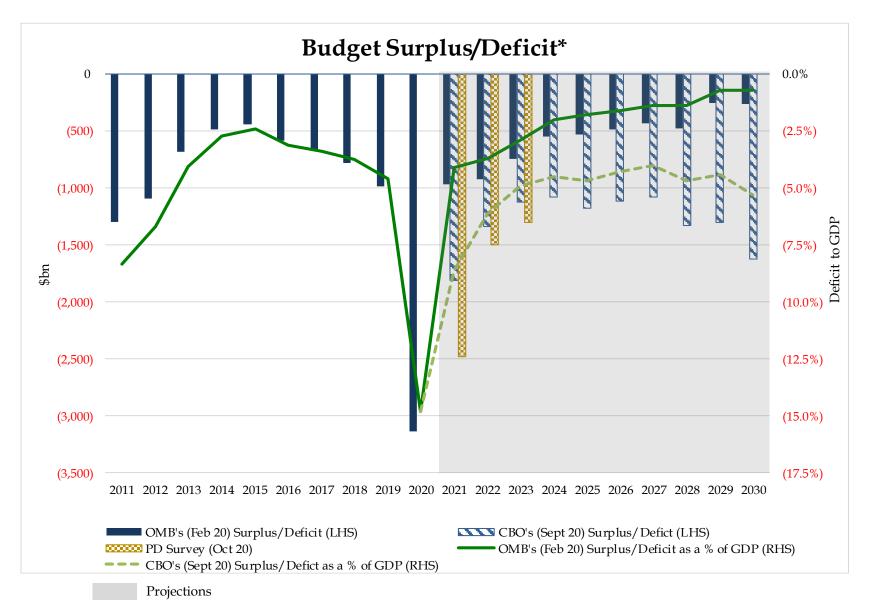
FY 2021-2023 Deficits and Privately-Held Net Marketable Borrowing Estimates*, in \$ billions

	Primary Dealers ¹	CBO^2
FY2021 Deficit Estimate	2,480	1,810
FY2022 Deficit Estimate	1,500	1,336
FY2023 Deficit Estimate	1,300	1,124
FY2021 Deficit Estimate Range	1,800-4,600	
FY2022 Deficit Estimate Range	1,200-3,100	
FY2023 Deficit Estimate Range	1,050-2,300	
FY2021 Privately-Held Net Marketable Borrowing Estimate	2,050	1,661
FY2022 Privately-Held Net Marketable Borrowing Estimate	1,550	1,389
FY2023 Privately-Held Net Marketable Borrowing Estimate	1,300	1,200
FY2021 Privately-Held Net Marketable Borrowing Range	1,000-3,800	
FY2022 Privately-Held Net Marketable Borrowing Range	961-2,600	
FY2023 Privately-Held Net Marketable Borrowing Range	900-2,350	
Estimates as of:	Oct-20	Sep-20

¹Estimates represent the medians from the primary dealer survey in October 2020.

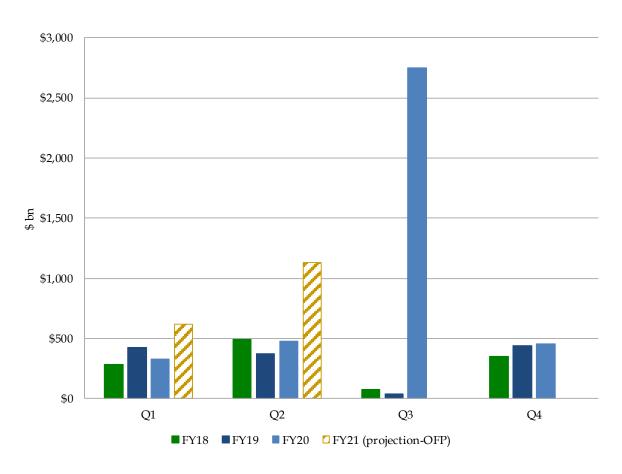
 $^{^2}$ CBO estimates are from Table 1 of "An Update to the Budget Outlook: 2020 to 2030," September, 2020.

^{*}Privately-held marketable borrowing excludes rollovers (auction "add-ons") of Treasury securities held in the Federal Reserve's System Open Market Account (SOMA) but includes financing required due to SOMA redemptions. Secondary market purchases of Treasury securities by SOMA do not directly change net privately-held marketable borrowing but, all else equal, when the securities mature and assuming the Fed does not redeem any maturing securities, would increase the amount of cash raised for a given privately-held auction size by increasing the SOMA "add-on" amount.



OMB's Projections are from OMB's Table S-10 of "A Budget for America's Future, Fiscal Year 2021," February 2020. CBO's Projections are from CBO's Table 1 of "An Update to the Budget Outlook: 2020 to 2030," September 2020 *OMB projections reflect pre-CARES Act forecasts and will be updated when new projections become available.

Privately-Held Net Marketable Borrowing Outlook*



^{*} Privately-held marketable borrowing excludes rollovers (auction "add-ons") of Treasury securities held in the Federal Reserve's System Open Market Account (SOMA) but includes financing required due to SOMA redemptions. Secondary market purchases of Treasury securities by SOMA do not directly change net privately-held marketable borrowing but, all else equal, when the securities mature and assuming the Fed does not redeem any maturing securities, would increase the amount of cash raised for a given privately-held auction size by increasing the SOMA "add-on" amount. For FY2021, estimates reflect OFP's assumption of \$1 trillion in additional stimulus.

Section III: Financing

Assumptions for Financing Section (pages 16 to 19)

- Portfolio and SOMA holdings as of 09/30/2020.
- Estimates assume private announced issuance sizes and patterns remain constant for nominal coupons, TIPS, and FRNs given changes made before the November 2020 refunding, while using total bills outstanding of ~\$5.03 trillion.
- The principal on the TIPS securities was accreted to each projection date based on market ZCIS levels as of 09/30/2020.
- No attempt was made to account for future financing needs.



Sources of Privately-Held Financing in FY20 Q4*^

July - September 2020	
Net Bill Issuance	(51)
Net Coupon Issuance	505
Subtotal: Net Marketable Borrowing	454
_	
Ending Cash Balance	1782
Beginning Cash Balance	1722
Subtotal: Change in Cash Balance	60
Net Implied Funding for FY20 Q4	394

	July	- September Bill Issuance		Fiscal Year-to-Date Bill Issuance			
Security	Gross	Maturing	Net	Gross	Maturing	Net	
4-Week	420	560	(140)	2,700	2,783	(83)	
8-Week	470	705	(235)	2,405	2,405	(0)	
13-Week	702	768	(66)	2,610	2,421	189	
26-Week	663	437	226	2,331	1,856	475	
52-Week	102	52	50	381	265	116	
CMBs							
6-Week	405	570	(165)	1,185	1,005	180	
15-Week	325	380	(55)	770	380	390	
17-Week	375	300	75	835	300	535	
22-Week	390	140	250	870	140	730	
39-Week	20	0	20	90	0	90	
Other	30	40	(10)	450	420	30	
Bill Subtotal	3,902	3,953	(51)	14,627	11,975	2,652	

		- September 2 oupon Issuan		Fiscal Year-to-Date Coupon Issuance			
Security	Gross	Maturing	Net	Gross	Maturing	Net	
2-Year FRN	68	52	16	242	187	55	
2-Year	150	93	57	522	320	202	
3-Year	144	56	88	498	270	228	
5-Year	153	90	63	534	426	108	
7-Year	141	60	81	447	239	208	
10-Year	102	30	72	338	141	197	
20-Year	64	0	64	101	0	101	
30-Year	68	5	63	228	10	218	
5-Year TIPS	0	0	0	64	55	9	
10-Year TIPS	26	33	(7)	76	54	22	
30-Year TIPS	7	0	7	15	0	15	
Coupon Subtotal	923	418	505	3,065	1,703	1,362	

^{*}Privately-held marketable borrowing excludes rollovers (auction "add-ons") of Treasury securities held in the Federal Reserve's System Open Market Account (SOMA) but includes financing required due to SOMA redemptions. Secondary market purchases of Treasury securities by SOMA do not directly change net privately-held marketable borrowing but, all else equal, when the securities mature and assuming the Fed does not redeem any maturing securities, would increase the amount of cash raised for a given privately-held auction size by increasing the SOMA "add-on" amount.

[^]An end-of-September 2020 cash balance of \$1,782 billion versus a beginning-of-July 2020 cash balance of \$1,722 billion. By keeping the cash balance constant, Treasury arrives at the net implied funding number.

Sources of Privately-Held Financing in FY21 Q1*

October - December 2020	
Assuming Constant Coupon Issuance Sizes**	
Treasury Announced Net Marketable Borrowing***	617
Net Coupon Issuance	623
Implied Change in Bills	(6)

		er - Decembe oupon Issuan		Fiscal Year-to-Date Coupon Issuance		
Security	Gross	Maturing^	Net	Gross	Maturing	Net
2-Year FRN	74	55	19	74	55	19
2-Year	162	86	76	162	86	76
3-Year	156	58	98	156	58	98
5-Year	165	83	82	165	83	82
7-Year	159	61	98	159	61	98
10-Year	108	43	65	108	43	65
20-Year	69	0	69	69	0	69
30-Year	72	0	72	72	0	72
5-Year TIPS	32	0	32	32	0	32
10-Year TIPS	12	0	12	12	0	12
30-Year TIPS	0	0	0	0	0	0
Coupon Subtotal	1,009	386	623	1,009	386	623

^{*} Privately-held marketable borrowing excludes rollovers (auction "add-ons") of Treasury securities held in the Federal Reserve's System Open Market Account (SOMA) but includes financing required due to SOMA redemptions. Secondary market purchases of Treasury securities by SOMA do not directly change net privately-held marketable borrowing but, all else equal, when the securities mature and assuming the Fed does not redeem any maturing securities, would increase the amount of cash raised for a given privately-held auction size by increasing the SOMA "add-on" amount.

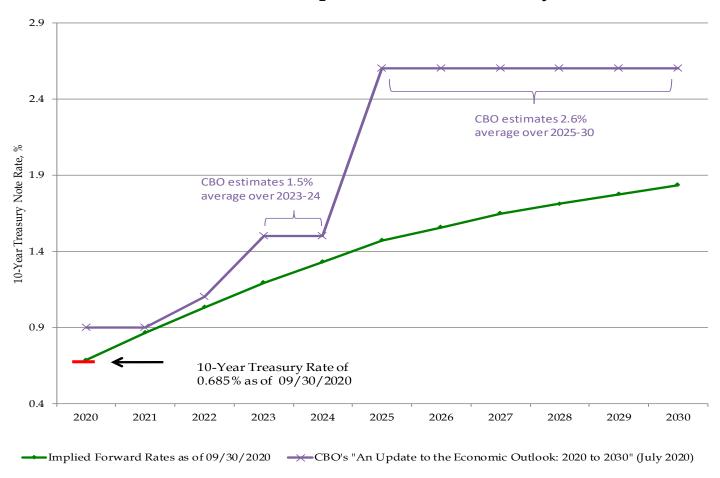
^{**} Keeping announced issuance sizes and patterns constant for nominal coupons, TIPS, and FRNs based on changes made before the November 2020 refunding.

*** Assumes an end-of-December 2020 cash balance of \$800 billion versus a beginning-of-October 2020 cash balance of \$1,782 billion.

Financing Estimates released by the Treasury can be found here: http://www.treasury.gov/resource-center/data-chart-center/quarterly-refunding/Pages/Latest.aspx

[^] Maturing amounts could change based on future Federal Reserve purchases.

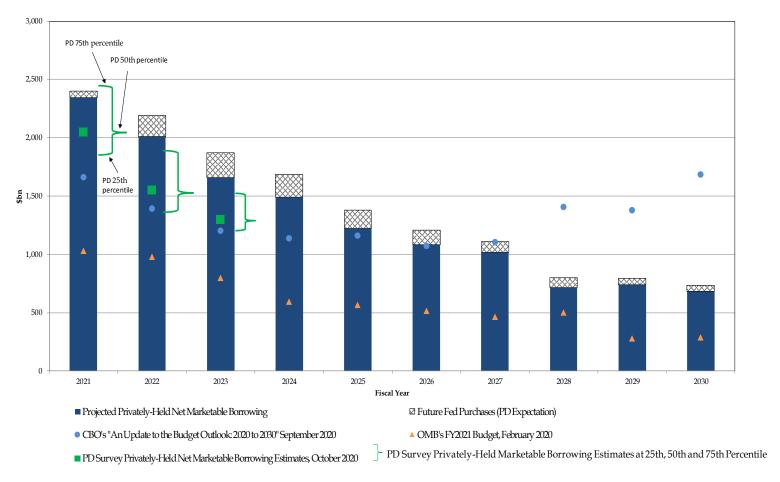
Interest Rate Assumptions: 10-Year Treasury Note*



*CBO's July economic assumption of the 10-Year Treasury note rates reflect projections for 2020, 2021, 2022, and averages for the periods 2023-24 and 2025-30. The forward rates are the implied 10-Year Treasury note rates on September 30, 2020.

Projected Privately-Held Net Marketable Borrowing

Assuming Private Coupon Issuance & Total Bills Outstanding Remain Constant as of 9/30/2020*

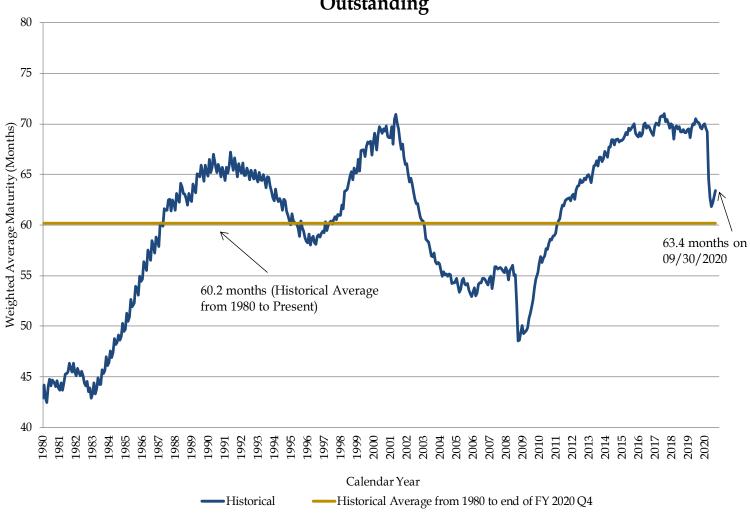


Treasury's latest primary dealer survey median estimates can be found on page 11. OMB's projections of the change in debt held by the public are from Table S-10 of "A Budget for America's Future, Fiscal Year 2021," February 2020. CBO's current law budget projections of the change in debt held by the public for FY2021 to FY2030 are derived from Table 1 of CBO's "An Update to The Budget Outlook: 2020 to 2030," September 2020. Future Fed purchases are derived from the Fed's September Primary Dealer Survey median results with maturity bucket weights based on current operations and pro-rata across securities within each maturity bucket. https://www.newyorkfed.org/medialibrary/media/markets/survey/2020/sep-2020-spd-results.pdf

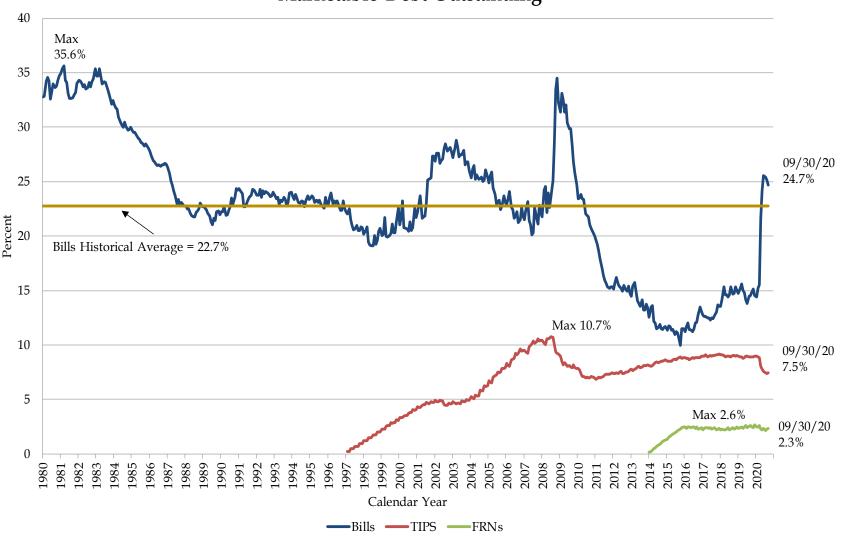
* Privately-held marketable borrowing excludes rollovers (auction "add-ons") of Treasury securities held in the Federal Reserve's System Open Market Account (SOMA) but includes financing required due to SOMA redemptions. No adjustments are made for open-market outright purchases.

Section IV: Portfolio Metrics

Historical Weighted Average Maturity of Marketable Debt Outstanding



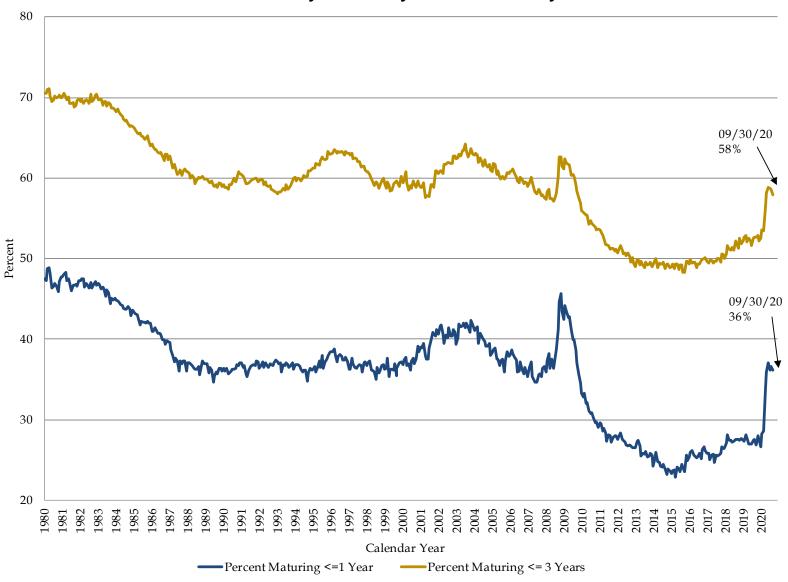
Bills, TIPS & FRNs Outstanding as a Percent of Marketable Debt Outstanding



Private Bills Holdings as a Percentage of Total Private Holdings



Treasury Maturity Profile History



Section V: Demand

Summary Statistics for Fiscal Year 2020 Q4 Auctions

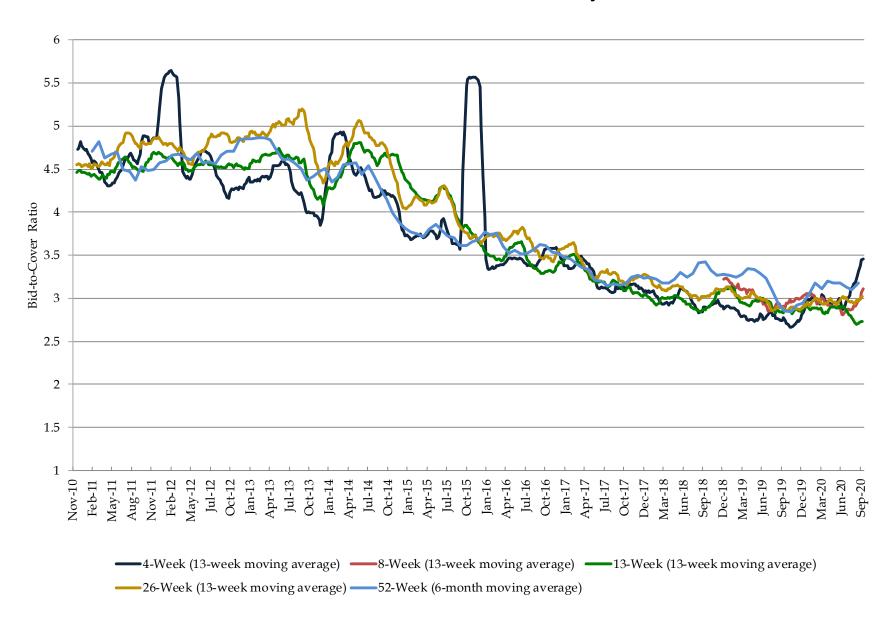
Security Type	Term	Stop Out Rate (%)*	Bid-to- Cover Ratio*	Competitive Awards (\$bn)	% Primary Dealer*	% Direct*	% Indirect*	Non- Competitive Awards (\$bn)	SOMA "Add- Ons" (\$bn)	10-Year Equivalent (\$bn)**
Bill	4-Week	0.090	3.4	400.9	51.9	4.6	43.5	19.14	37.3	3.7
Bill	8-Week	0.103	3.1	462.2	57.6	3.9	38.5	7.83	41.9	8.2
Bill	13-Week	0.112	2.7	686.3	54.5	5.4	40.2	15.72	74.2	20.2
Bill	26-Week	0.123	3.0	651.3	45.2	3.6	51.2	11.74	70.1	38.1
Bill	52-Week	0.145	3.2	101.3	59.6	7.2	33.1	0.65	12.2	11.9
CMB	6-Week	0.098	3.3	399.8	52.4	7.3	40.3	0.22	0.0	4.8
CMB	15-Week	0.112	3.6	350.0	55.3	7.1	37.6	0.03	0.0	10.5
CMB	17-Week	0.115	3.4	399.9	56.8	4.1	39.0	0.16	0.0	13.6
CMB	22-Week	0.122	3.3	420.0	52.7	3.5	43.8	0.02	0.0	18.5
CMB	39-Week	0.140	3.4	20.0	72.1	4.5	23.4	0.01	0.0	1.6
Coupon	2-Year	0.148	2.5	149.6	33.7	14.2	52.1	0.38	16.9	34.8
Coupon	3-Year	0.179	2.4	143.6	33.2	12.8	54.0	0.38	34.6	56.1
Coupon	5-Year	0.287	2.5	152.9	22.6	15.3	62.2	0.07	17.3	88.4
Coupon	7-Year	0.476	2.4	141.0	18.4	16.6	65.0	0.01	15.9	113.0
Coupon	10-Year	0.679	2.4	102.0	22.3	15.3	62.4	0.02	26.6	130.0
Coupon	20-Year	1.161	2.3	64.0	24.1	12.7	63.1	0.01	7.1	131.5
Coupon	30-Year	1.407	2.3	68.0	22.9	12.9	64.2	0.02	18.1	221.9
TIPS	10-Year	-0.947	2.4	25.9	17.1	12.3	70.6	0.07	3.2	30.3
TIPS	30-Year	-0.272	2.3	7.0	22.1	7.5	70.4	0.01	0.6	22.5
FRN	2-Year	0.056	3.0	68.0	50.6	3.9	45.5	0.04	2.7	0.0
	Total Bills	0.112	3.2	3,891.5	53.2	4.9	41.9	55.52	235.7	131.2
	Total Coupons	0.485	2.4	821.1	25.9	14.5	59.6	0.89	136.5	775.7

Total Bills	0.112	3.2	3,891.5	53.2	4.9	41.9	55.52	235.7	131.2
Total Coupons	0.485	2.4	821.1	25.9	14.5	59.6	0.89	136.5	775.7
Total TIPS	-0.803	2.4	32.9	18.1	11.3	70.6	0.08	3.8	52.7
Total FRN	0.056	3.0	68.0	50.6	3.9	45.5	0.04	2.7	0.0

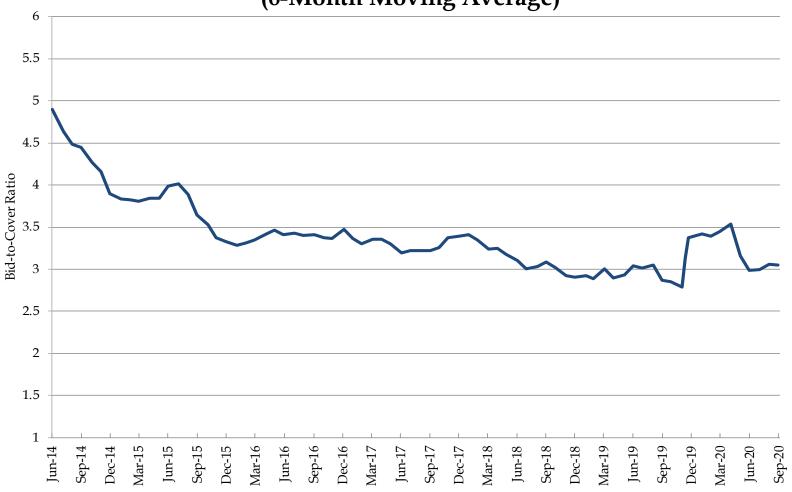
^{*}Weighted averages of Competitive Awards. FRNs are reported on discount margin basis.

^{**}Approximated using prices at settlement and includes both Competitive and Non-Competitive Awards. For TIPS 10-year equivalent, a constant auction BEI is used as the inflation assumption.

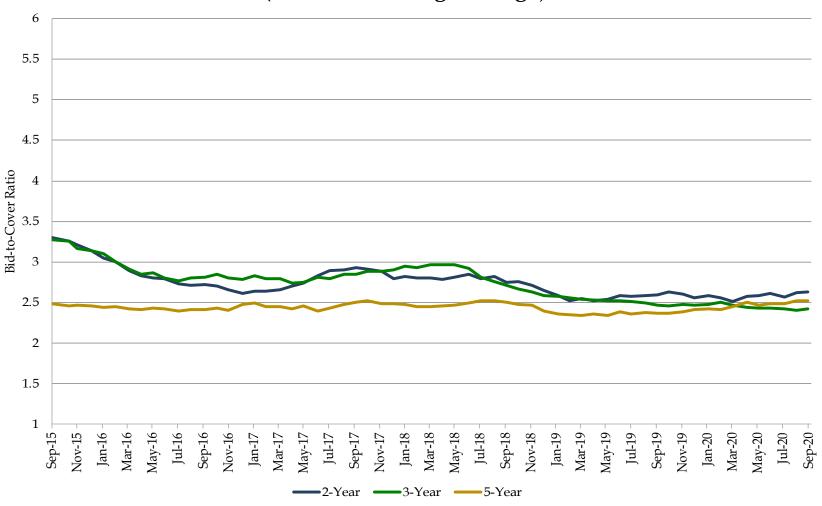
Bid-to-Cover Ratios for Treasury Bills



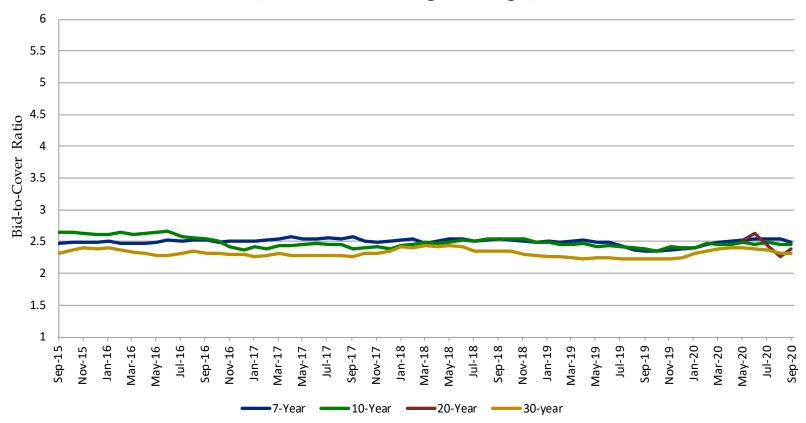
Bid-to-Cover Ratios for FRNs (6-Month Moving Average)



Bid-to-Cover Ratios for 2-, 3-, and 5-Year Nominal Securities (6-Month Moving Average)

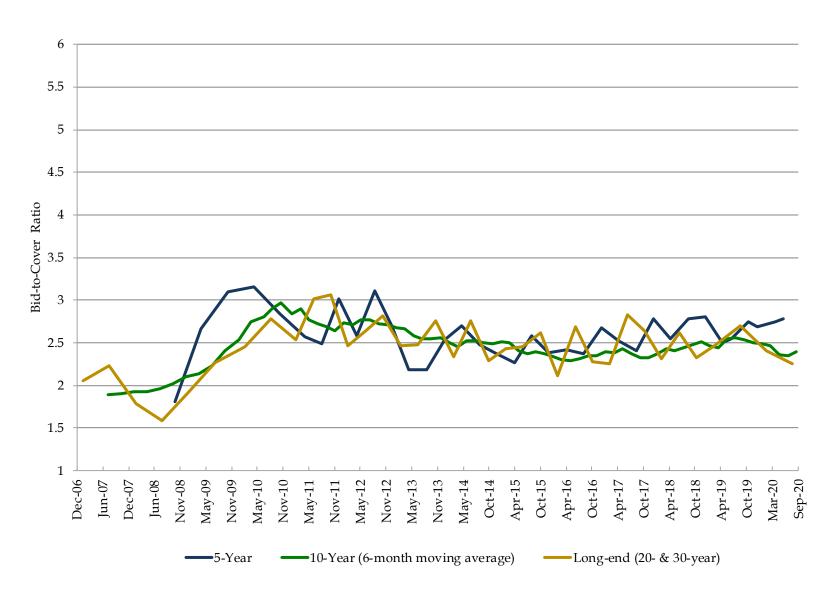


Bid-to-Cover Ratios for 7-, 10-, 20-, and 30-Year Nominal Securities (6-Month Moving Average)*

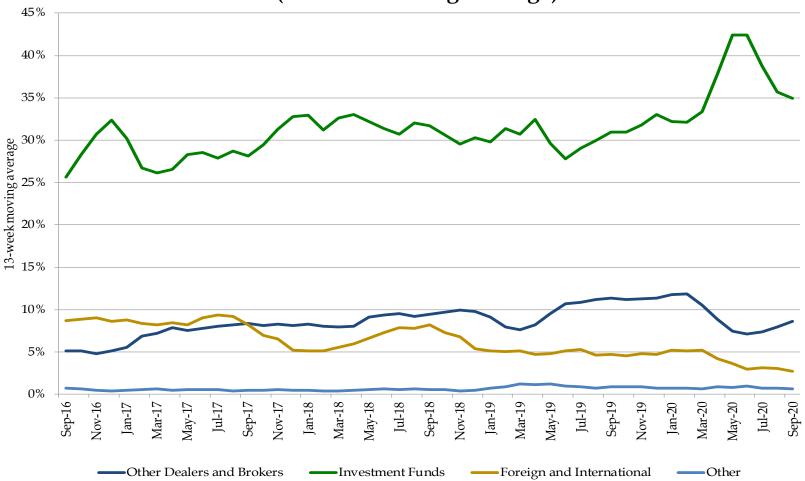


^{* 20-}Year bid-to-cover ratio reflects actuals instead of moving average.

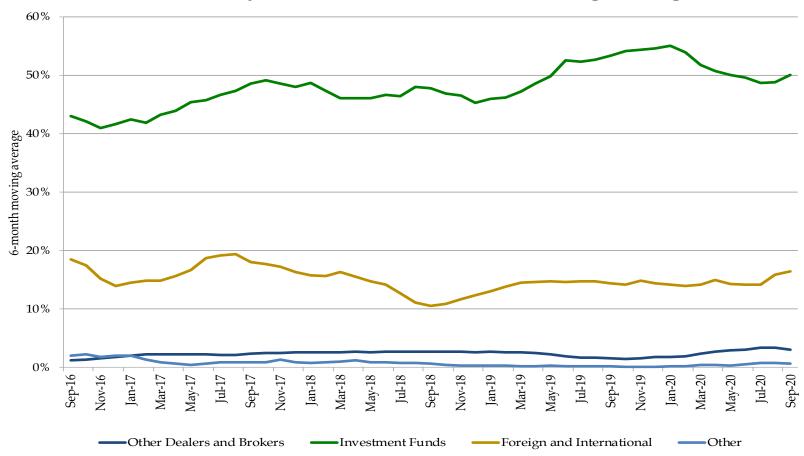
Bid-to-Cover Ratios for TIPS



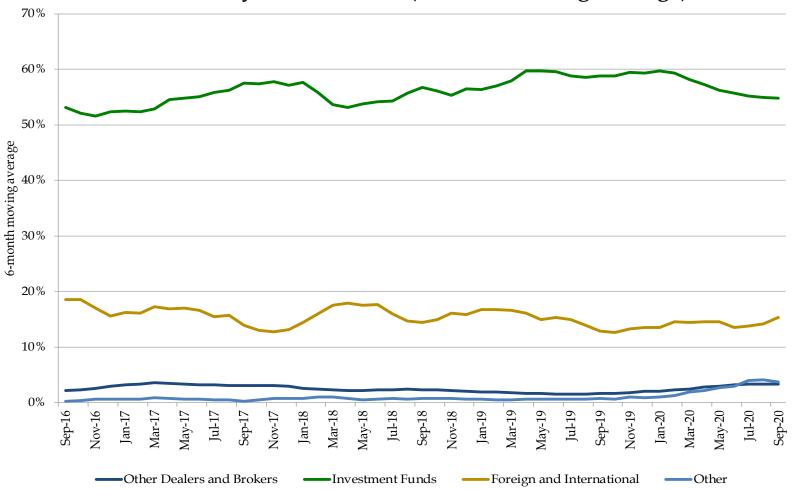
Percent Awarded in Bill Auctions by Investor Class (13-Week Moving Average)



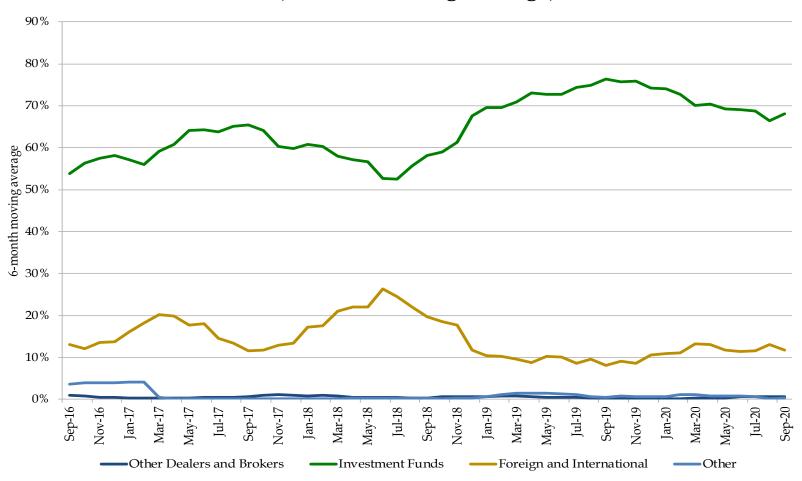
Percent Awarded in 2-, 3-, and 5-Year Nominal Security Auctions by Investor Class (6-Month Moving Average)



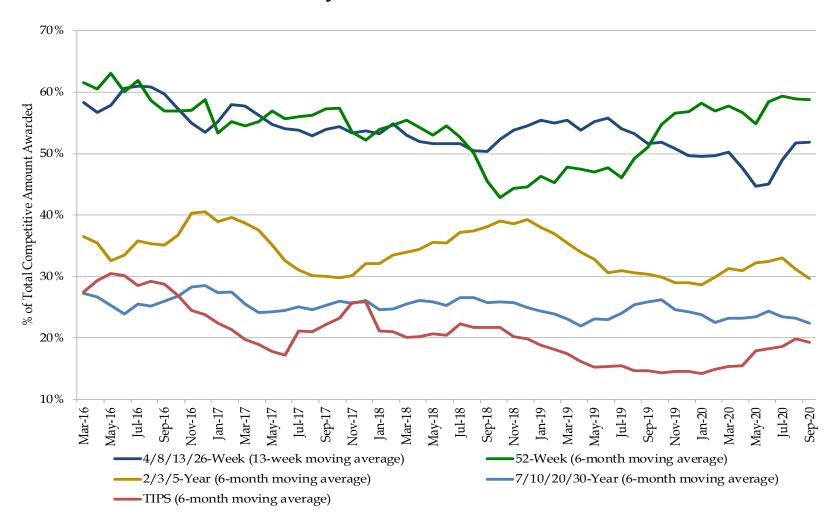
Percent Awarded in 7-, 10-, 20-, 30-Year Nominal Security Auctions by Investor Class (6-Month Moving Average)



Percent Awarded in TIPS Auctions by Investor Class (6-Month Moving Average)

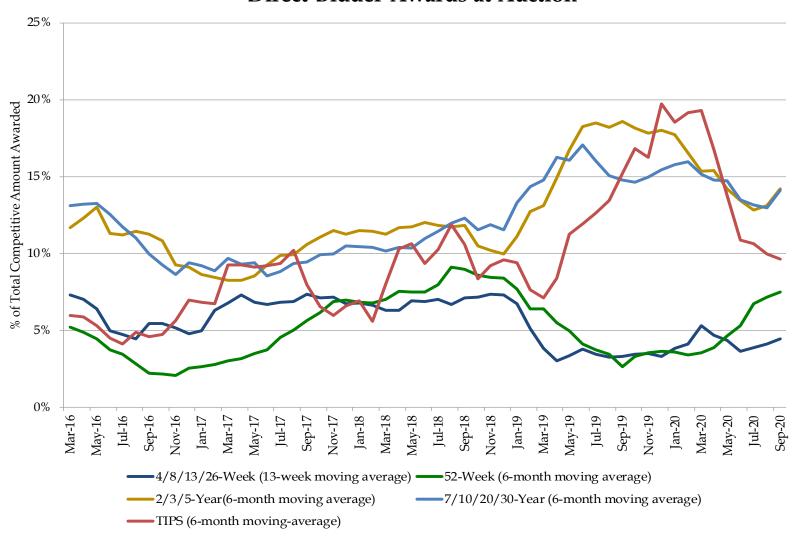


Primary Dealer Awards at Auction



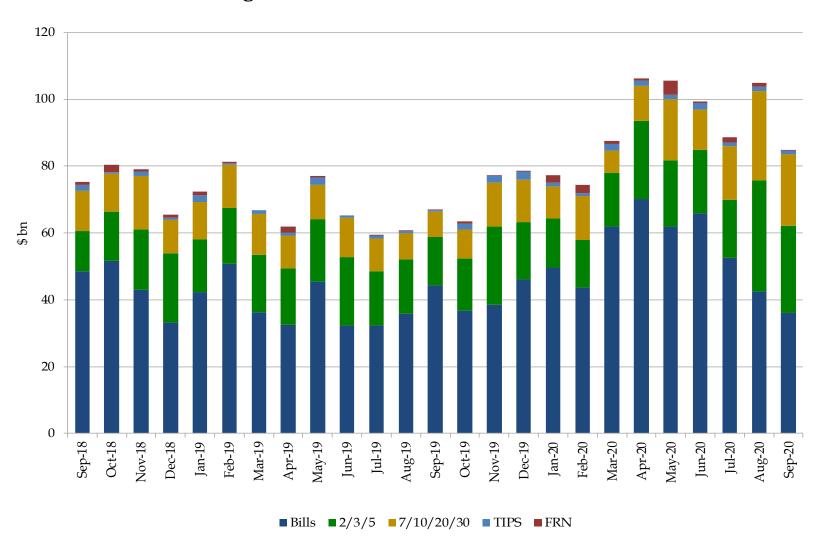
Competitive Amount Awarded excludes SOMA add-ons.

Direct Bidder Awards at Auction

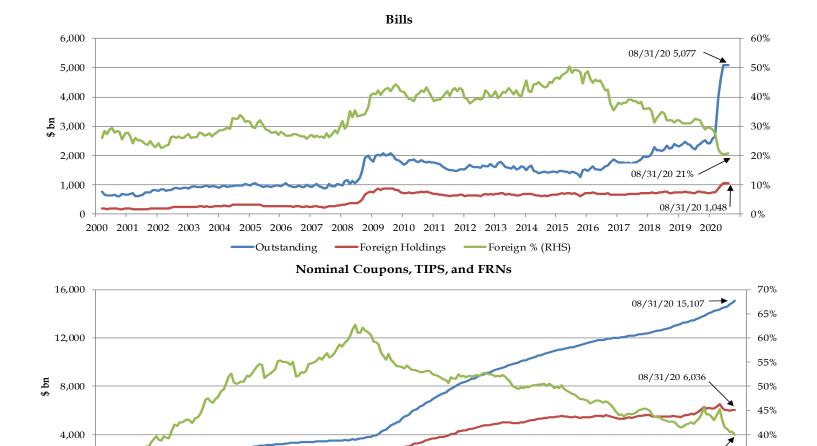


Competitive Amount Awarded excludes SOMA add-ons.

Total Foreign Awards of Treasuries at Auction, \$ billions



Total Foreign Holdings



Source: Treasury International Capital (TIC) System.

For more information on foreign participation data, including more details about the TIC data shown here, please refer to Treasury Presentation to TBAC "Brief Overview of Key Data Sources on Foreign Participation in the U.S. Treasury Securities Market" at the Treasury February 2019 Refunding.

Outstanding

2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020

Foreign Holdings

Foreign % (RHS)

35% 30%

08/31/20 40%



Projected Privately-Held Net Marketable Borrowing Assuming Private Coupon Issuance & Total Bills Outstanding Remain Constant as of 9/30/2020*

Fiscal Year	Bills	2/3/5	7/10/20/30	TIPS	FRN	Historical/Projected Net Borrowing Capacity
2016	289	(107)	515	58	41	795
2017	155	(66)	378	51	(0)	519
2018	438	197	493	45	23	1,196
2019	137	498	534	51	59	1,280
2020	2,652	538	724	46	55	4,014
2021	0	1,057	1,166	45	74	2,343
2022	0	747	1,178	31	56	2,011
2023	0	602	1,034	23	0	1,659
2024	0	372	1,080	38	0	1,491
2025	0	147	1,103	(26)	0	1,224
2026	0	0	1,087	(5)	0	1,082
2027	0	0	1,020	(3)	0	1,017
2028	0	0	736	(22)	0	714
2029	0	0	753	(13)	0	740
2030	0	0	688	(5)	0	683

Projections reflect only SOMA rollovers at auction of principal payments of Treasury securities. No adjustments are made for open-market outright purchases and subsequent rollovers.

^{*}Privately-held marketable borrowing excludes rollovers (auction "add-ons") of Treasury securities held in the Federal Reserve's System Open Market Account (SOMA) but includes financing required due to SOMA redemptions.

					Bills					
Issue	Settle Date	Stop Out Rate (%)*	Bid-to- Cover Ratio*	Competitive Awards (\$bn)	% Primary Dealer*	% Direct*	% Indirect*	Non-Competitive Awards (\$bn)	SOMA "Add Ons" (\$bn)	10-Year Equivalent (\$bn)**
4-Week	7/7/2020	0.115	3.19	43.7	41.5	0.7	57.8	1.3	3.2	0.4
4-Week	7/14/2020	0.100	3.18	38.7	50.6	5.4	44.1	1.3	3.3	0.3
4-Week	7/21/2020	0.105	3.49	33.2	45.8	2.4	51.8	1.8	2.7	0.3
4-Week	7/28/2020	0.080	3.59	28.6	44.2	2.3	53.5	1.4	3.0	0.3
4-Week	8/4/2020	0.090	3.09	28.3	75.5	4.7	19.9	1.7	2.9	0.3
4-Week	8/11/2020	0.080	3.76	28.4	39.9	0.7	59.4	1.6	3.0	0.3
4-Week	8/18/2020	0.085	3.36	28.5	47.8	3.6	48.6	1.5	2.5	0.3
4-Week	8/25/2020	0.080	3.17	28.7	66.4	7.2	26.4	1.3	2.9	0.3
4-Week	9/1/2020	0.080	2.93	28.2	64.2	6.3	29.4	1.8	2.8	0.3
4-Week	9/8/2020	0.090	3.83	28.7	48.3	1.6	50.1	1.3	2.9	0.3
4-Week	9/15/2020	0.090	3.53	28.4	49.2	9.1	41.7	1.6	2.4	0.3
4-Week	9/22/2020	0.080	3.74	28.8	52.6	11.8	35.6	1.2	2.9	0.3
4-Week	9/29/2020	0.075	3.88	28.6	56.0	6.5	37.5	1.4	2.8	0.3
8-Week	7/7/2020	0.135	2.91	44.7	51.2	2.0	46.9	0.3	3.2	0.8
8-Week	7/14/2020	0.120	2.96	38.9	68.4	4.9	26.7	1.1	3.3	0.7
8-Week	7/21/2020	0.110	3.22	34.3	62.7	3.2	34.1	0.7	2.7	0.6
8-Week	7/28/2020	0.100	2.85	34.5	74.5	3.7	21.8	0.5	3.4	0.6
8-Week	8/4/2020	0.095	2.96	33.8	61.5	3.2	35.3	1.2	3.4	0.6
8-Week	8/11/2020	0.100	2.88	34.6	57.0	4.3	38.7	0.4	3.5	0.6
8-Week	8/18/2020	0.100	3.03	34.6	49.0	2.4	48.6	0.4	2.9	0.6
8-Week	8/25/2020	0.090	2.99	34.4	54.0	4.0	42.0	0.6	3.3	0.6
8-Week	9/1/2020	0.090	2.93	33.8	50.0	3.0	47.0	1.2	3.3	0.6
8-Week	9/8/2020	0.100	3.14	34.6	59.5	4.2	36.3	0.4	3.4	0.6
8-Week	9/15/2020	0.105	3.23	34.7	46.1	4.5	49.4	0.3	2.8	0.6
8-Week	9/22/2020	0.095	3.09	34.5	58.6	6.0	35.3	0.5	3.4	0.6
8-Week	9/29/2020	0.090	3.60	34.6	56.9	6.2	36.9	0.4	3.3	0.6

^{*}Weighted averages of competitive awards.

**Approximated using prices at settlement and includes both competitive and non-competitive awards.

				Bi	lls (cont.)					
Issue	Settle Date	Stop Out Rate	Bid-to- Cover Ratio*	Competitive Awards (\$bn)	% Primary Dealer*	% Direct*	% Indirect*	Non- Competitive Awards (\$bn)	SOMA "Add Ons" (\$bn)	10-Year Equivalent (\$bn)**
13-Week	7/9/2020	0.150	2.66	52.6	56.9	3.3	39.8	1.4	5.6	1.5
13-Week	7/16/2020	0.145	2.68	52.7	56.6	4.6	38.7	1.3	7.3	1.6
13-Week	7/23/2020	0.120	2.78	53.0	56.4	4.3	39.3	1.0	8.4	1.6
13-Week	7/30/2020	0.105	2.48	52.2	61.9	6.8	31.3	1.8	6.3	1.6
13-Week	8/6/2020	0.100	2.80	53.0	52.7	4.7	42.7	1.0	5.9	1.6
13-Week	8/13/2020	0.105	2.75	53.0	49.4	4.3	46.3	1.0	6.3	1.6
13-Week	8/20/2020	0.105	2.46	52.9	57.6	6.6	35.8	1.1	6.9	1.6
13-Week	8/27/2020	0.100	2.57	52.3	59.3	3.5	37.2	1.7	4.5	1.5
13-Week	9/3/2020	0.105	2.71	53.0	55.1	5.1	39.8	1.0	6.5	1.6
13-Week	9/10/2020	0.115	2.74	53.1	48.3	7.3	44.4	0.9	5.7	1.6
13-Week	9/17/2020	0.110	3.12	52.8	47.3	6.6	46.1	1.2	4.3	1.5
13-Week	9/24/2020	0.100	2.89	52.9	57.5	7.2	35.3	1.1	2.0	1.5
13-Week	10/1/2020	0.100	2.88	52.6	49.0	5.3	45.6	1.4	4.5	1.5
26-Week	7/9/2020	0.165	2.81	50.3	55.0	2.8	42.2	0.7	5.3	2.9
26-Week	7/16/2020	0.145	3.17	49.9	39.4	5.0	55.6	1.1	6.9	3.0
26-Week	7/23/2020	0.130	2.97	50.1	43.4	3.3	53.3	0.9	7.9	3.1
26-Week	7/30/2020	0.130	2.92	49.4	44.0	3.9	52.0	1.6	5.9	3.0
26-Week	8/6/2020	0.105	2.91	50.2	52.4	3.5	44.1	0.8	5.6	3.0
26-Week	8/13/2020	0.120	2.98	50.1	40.9	3.2	55.9	0.9	6.0	3.0
26-Week	8/20/2020	0.120	2.87	50.2	50.9	3.3	45.8	0.8	6.5	2.9
26-Week	8/27/2020	0.120	2.92	49.4	46.1	3.3	50.6	1.6	4.2	2.8
26-Week	9/3/2020	0.115	3.23	50.4	39.0	2.3	58.7	0.6	6.2	3.0
26-Week	9/10/2020	0.125	2.86	50.5	51.7	3.0	45.4	0.5	5.4	2.9
26-Week	9/17/2020	0.120	3.26	50.3	44.8	7.2	48.0	0.7	4.1	2.9
26-Week	9/24/2020	0.105	3.23	50.3	43.7	3.0	53.3	0.7	1.9	2.8
26-Week	10/1/2020	0.105	3.11	50.1	36.2	3.1	60.7	0.9	4.2	2.9
52-Week	7/16/2020	0.155	3.14	33.8	62.2	11.7	26.1	0.2	4.6	4.0
52-Week	8/13/2020	0.140	3.32	33.8	52.4	4.7	42.9	0.2	4.0	4.0
52-Week	9/10/2020	0.140	3.04	33.8	64.3	5.3	30.4	0.2	3.6	3.9

^{*}Weighted averages of competitive awards.

**Approximated using prices at settlement and includes both competitive and non-competitive awards.

Bills (cont.)											
Issue	Settle Date	Stop Out Rate	Bid-to- Cover Ratio*	Competitive Awards (\$bn)	% Primary Dealer*	% Direct*	% Indirect*	Non- Competitive Awards (\$bn)	SOMA "Add Ons" (\$bn)	10-Year Equivalent (\$bn)**	
6-Week	7/9/2020	0.125	3.32	35.0	45.0	6.4	48.6	0.0	0.0	0.4	
6-Week	7/16/2020	0.120	3.25	35.0	39.9	6.2	53.9	0.0	0.0	0.4	
6-Week	7/23/2020	0.100	3.34	30.0	53.0	4.0	43.0	0.0	0.0	0.4	
6-Week	7/30/2020	0.100	3.22	30.0	57.8	6.8	35.4	0.0	0.0	0.4	
6-Week	8/6/2020	0.085	3.45	30.0	48.8	6.0	45.2	0.0	0.0	0.4	
6-Week	8/13/2020	0.095	3.19	30.0	49.4	5.4	45.2	0.0	0.0	0.4	
6-Week	8/20/2020	0.090	3.22	30.0	54.9	5.8	39.3	0.0	0.0	0.4	
6-Week	8/27/2020	0.085	3.39	30.0	52.5	5.5	42.0	0.0	0.0	0.4	
6-Week	9/3/2020	0.090	3.42	30.0	48.6	6.5	44.8	0.0	0.0	0.4	
6-Week	9/10/2020	0.105	3.19	30.0	56.1	8.3	35.7	0.0	0.0	0.4	
6-Week	9/17/2020	0.095	3.37	30.0	62.2	12.0	25.8	0.0	0.0	0.4	
6-Week	9/24/2020	0.085	3.61	30.0	60.0	10.7	29.3	0.0	0.0	0.4	
6-Week	10/1/2020	0.085	3.42	30.0	56.1	11.9	32.0	0.0	0.0	0.4	
15-Week	7/7/2020	0.140	3.91	25.0	63.7	5.2	31.1	0.0	0.0	0.7	
15-Week	7/14/2020	0.145	3.68	25.0	58.4	7.6	34.1	0.0	0.0	0.7	
15-Week	7/21/2020	0.130	3.95	25.0	53.5	4.4	42.0	0.0	0.0	0.7	
15-Week	7/28/2020	0.120	3.50	25.0	66.4	6.7	26.9	0.0	0.0	0.8	
15-Week	8/4/2020	0.105	3.53	25.0	52.4	7.5	40.1	0.0	0.0	0.8	
15-Week	8/11/2020	0.105	3.34	25.0	62.6	3.7	33.6	0.0	0.0	0.8	
15-Week	8/18/2020	0.110	3.42	25.0	50.6	6.5	42.9	0.0	0.0	0.8	
15-Week	8/25/2020	0.105	3.36	25.0	61.5	6.0	32.5	0.0	0.0	0.7	
15-Week	9/1/2020	0.100	3.68	25.0	53.2	8.0	38.8	0.0	0.0	0.8	
15-Week	9/8/2020	0.115	3.54	25.0	51.8	7.6	40.6	0.0	0.0	0.8	
15-Week	9/15/2020	0.115	3.70	25.0	48.0	7.8	44.2	0.0	0.0	0.8	
15-Week	9/22/2020	0.100	3.76	25.0	54.2	10.6	35.2	0.0	0.0	0.8	
15-Week	9/29/2020	0.090	4.08	25.0	54.0	12.4	33.6	0.0	0.0	0.8	
15-Week	10/6/2020	0.095	3.61	25.0	44.2	4.9	50.9	0.0	0.0	0.8	

^{*}Weighted averages of competitive awards.
**Approximated using prices at settlement and includes both competitive and non-competitive awards.

Bills (cont.)											
Issue	Settle Date	Stop Out Rate (%)*	Bid-to-Cover Ratio*	Competitiv e Awards (\$bn)	% Primary Dealer*	% Direct*	% Indirect*	Non- Competitiv e Awards (\$bn)	SOMA "Add Ons" (\$bn)	10-Year Equival ent (\$bn)**	
17-Week	7/9/2020	0.150	3.18	35.0	59.2	3.9	36.9	0.0	0.0	1.2	
17-Week	7/16/2020	0.145	3.21	35.0	55.1	2.8	42.1	0.0	0.0	1.2	
17-Week	7/23/2020	0.120	3.08	30.0	70.2	5.1	24.7	0.0	0.0	1.0	
17-Week	7/30/2020	0.110	3.40	30.0	59.1	3.3	37.6	0.0	0.0	1.0	
17-Week	8/6/2020	0.100	3.45	30.0	61.5	4.6	33.9	0.0	0.0	1.0	
17-Week	8/13/2020	0.110	3.39	30.0	57.3	2.4	40.2	0.0	0.0	1.0	
17-Week	8/20/2020	0.110	3.36	30.0	53.5	3.3	43.2	0.0	0.0	1.0	
17-Week	8/27/2020	0.110	3.05	30.0	68.3	2.9	28.8	0.0	0.0	1.0	
17-Week	9/3/2020	0.115	3.21	30.0	57.7	3.7	38.6	0.0	0.0	1.0	
17-Week	9/10/2020	0.120	3.55	30.0	44.3	4.9	50.7	0.0	0.0	1.0	
17-Week	9/17/2020	0.110	3.88	30.0	60.7	11.5	27.8	0.0	0.0	1.0	
17-Week	9/24/2020	0.095	3.95	30.0	44.5	2.2	53.3	0.0	0.0	1.0	
17-Week	10/1/2020	0.090	4.19	30.0	47.2	3.4	49.5	0.0	0.0	1.0	
22-Week	7/7/2020	0.155	3.18	30.0	64.5	2.3	33.1	0.0	0.0	1.3	
22-Week	7/14/2020	0.155	3.33	30.0	53.7	3.9	42.5	0.0	0.0	1.3	
22-Week	7/21/2020	0.145	3.40	30.0	57.6	1.6	40.8	0.0	0.0	1.3	
22-Week	7/28/2020	0.135	3.18	30.0	45.8	2.1	52.1	0.0	0.0	1.3	
22-Week	8/4/2020	0.110	3.48	30.0	44.8	4.5	50.7	0.0	0.0	1.3	
22-Week	8/11/2020	0.110	2.91	30.0	73.7	3.2	23.1	0.0	0.0	1.3	
22-Week	8/18/2020	0.120	3.28	30.0	41.8	3.2	55.0	0.0	0.0	1.3	
22-Week	8/25/2020	0.115	3.39	30.0	60.0	6.3	33.8	0.0	0.0	1.3	
22-Week	9/1/2020	0.110	3.67	30.0	46.0	3.2	50.8	0.0	0.0	1.3	
22-Week	9/8/2020	0.120	3.26	30.0	54.0	4.8	41.3	0.0	0.0	1.3	
22-Week	9/15/2020	0.120	3.29	30.0	50.5	3.8	45.7	0.0	0.0	1.3	
22-Week	9/22/2020	0.110	3.45	30.0	50.8	3.0	46.2	0.0	0.0	1.3	
22-Week	9/29/2020	0.100	3.29	30.0	63.6	4.1	32.3	0.0	0.0	1.3	
22-Week	10/6/2020	0.105	3.53	30.0	30.6	3.3	66.1	0.0	0.0	1.3	
39-Week	7/23/2020	0.140	3.35	20.0	72.1	4.5	23.4	0.0	0.0	1.6	

^{*}Weighted averages of competitive awards.

**Approximated using prices at settlement and includes both competitive and non-competitive awards.

Nominal Coupons										
Issue	Settle Date	Stop Out Rate (%)*	Bid-to- Cover Ratio*	Competitive Awards (\$bn)	% Primary Dealer*	% Direct*	% Indirect*	Non- Competitive Awards (\$bn)	SOMA "Add Ons" (\$bn)	10-Year Equivalent (\$bn)**
2-Year	7/31/2020	0.155	2.34	47.8	39.3	14.8	45.8	0.2	5.5	11.3
2-Year	8/31/2020	0.155	2.78	49.9	28.7	13.7	57.6	0.1	4.3	11.2
2-Year	9/30/2020	0.136	2.42	51.9	33.4	14.1	52.5	0.1	7.1	12.3
3-Year	7/15/2020	0.190	2.44	45.9	32.4	13.3	54.3	0.1	4.0	15.7
3-Year	8/17/2020	0.179	2.44	47.9	30.7	12.3	57.0	0.1	28.5	24.2
3-Year	9/15/2020	0.170	2.28	49.9	36.3	13.0	50.7	0.1	2.1	16.2
5-Year	7/31/2020	0.288	2.32	49.0	29.6	12.3	58.1	0.0	5.6	28.6
5-Year	8/31/2020	0.298	2.71	51.0	17.8	15.9	66.2	0.0	4.4	28.5
5-Year	9/30/2020	0.275	2.52	53.0	20.7	17.4	61.9	0.0	7.3	31.3
7-Year	7/31/2020	0.446	2.45	44.0	19.3	16.8	63.9	0.0	5.0	35.7
7-Year	8/31/2020	0.519	2.47	47.0	15.3	16.4	68.3	0.0	4.1	36.4
7-Year	9/30/2020	0.462	2.42	50.0	20.5	16.6	62.8	0.0	6.8	41.0
10-Year	7/15/2020	0.653	2.62	29.0	19.7	17.0	63.4	0.0	2.5	31.5
10-Year	8/17/2020	0.677	2.41	38.0	19.8	14.7	65.4	0.0	22.6	62.1
10-Year	9/15/2020	0.704	2.30	35.0	27.1	14.6	58.3	0.0	1.4	36.4
20-Year	7/31/2020	1.059	2.43	17.0	21.2	11.8	67.0	0.0	1.9	35.2
20-Year	8/31/2020	1.185	2.26	25.0	26.2	11.2	62.6	0.0	2.2	50.1
20-Year	9/30/2020	1.213	2.39	22.0	24.0	15.3	60.7	0.0	3.0	46.2
30-Year	7/15/2020	1.330	2.50	19.0	17.4	10.5	72.0	0.0	1.7	53.6
30-Year	8/17/2020	1.406	2.14	26.0	28.3	11.9	59.8	0.0	15.5	107.6
30-Year	9/15/2020	1.473	2.31	23.0	21.3	16.1	62.6	0.0	0.9	60.7
2-Year FRN	7/31/2020	0.055	3.29	24.0	33.2	1.3	65.6	0.0	2.7	0.0
2-Year FRN	8/28/2020	0.055	2.85	22.0	45.9	1.3	52.7	0.0	0.0	0.0
2-Year FRN	9/25/2020	0.058	2.88	22.0	74.4	9.4	16.3	0.0	0.0	0.0

TIPS												
Issue	Settle Date	Stop Out Rate (%)*	Bid-to- Cover Ratio*	Competitive Awards (\$bn)	% Primary Dealer*	% Direct*	% Indirect*	Non- Competitive Awards (\$bn)	SOMA "Add Ons" (\$bn)	10-Year Equivalent (\$bn)**		
10-Year TIPS	7/31/2020	(0.930)	2.24	14.0	17.8	9.9	72.3	0.0	1.6	16.3		
10-Year TIPS	9/30/2020	(0.966)	2.65	12.0	16.3	15.0	68.7	0.0	1.6	13.9		
30-Year TIPS	8/31/2020	(0.272)	2.25	7.0	22.1	7.5	70.4	0.0	0.6	22.5		

^{*}Weighted averages of competitive awards. FRNs are reported on discount margin basis.

^{**}Approximated using prices at settlement and includes both competitive and non-competitive awards. For TIPS 10-Year equivalent, a constant auction BEI is used as the inflation assumption.